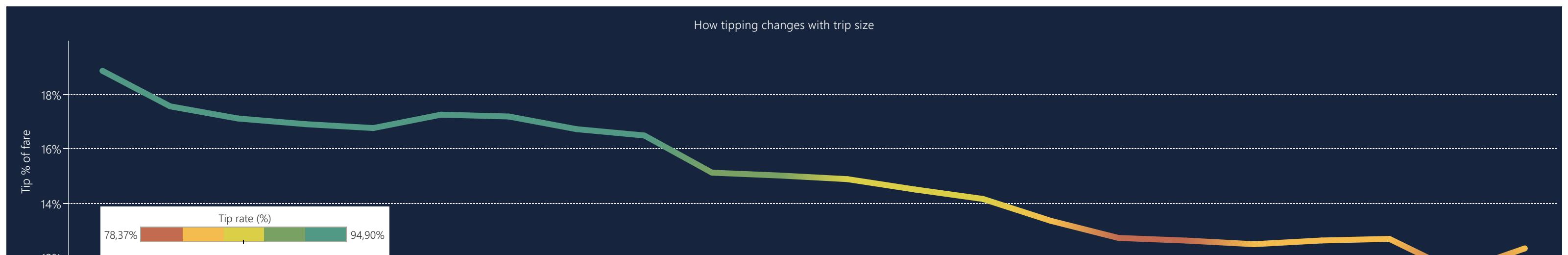
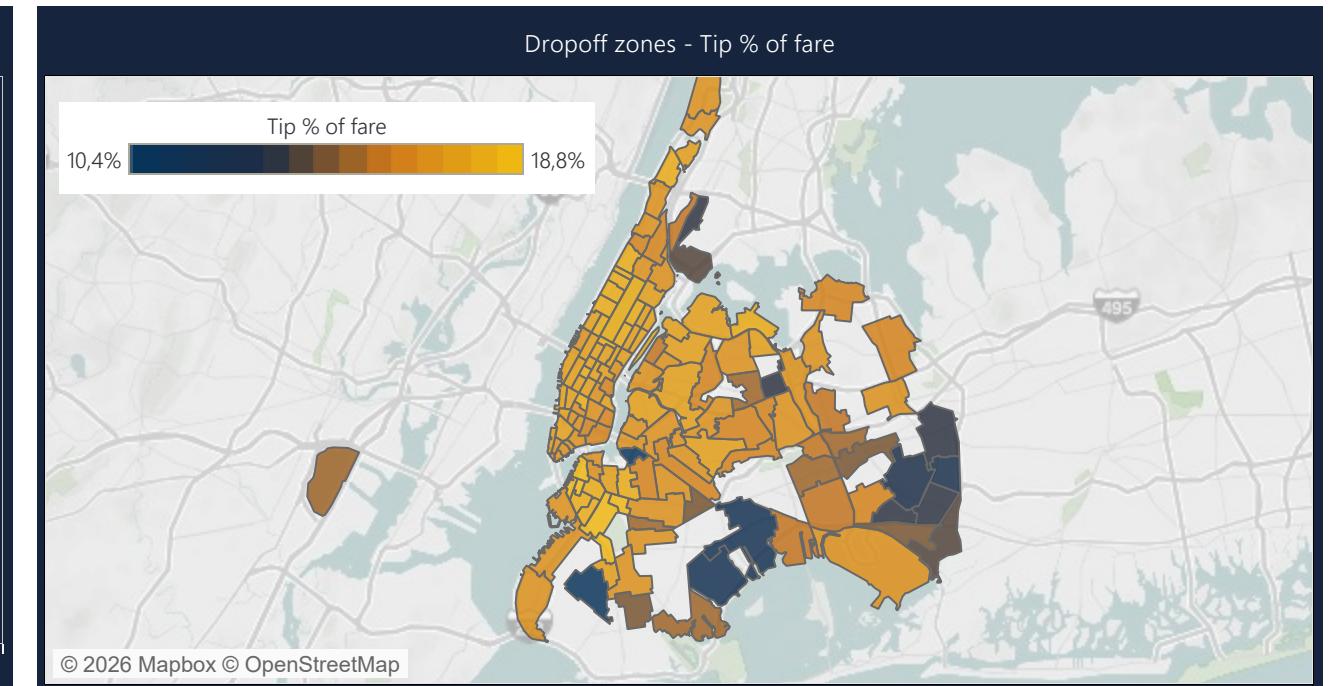
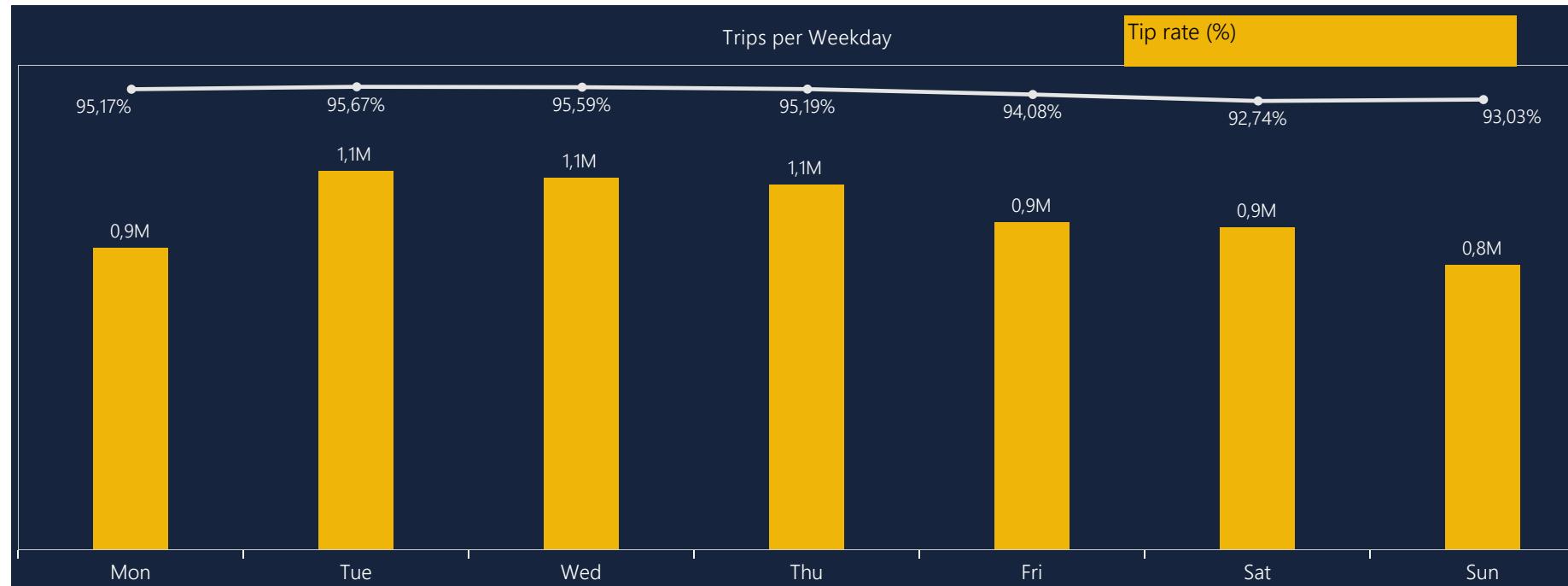
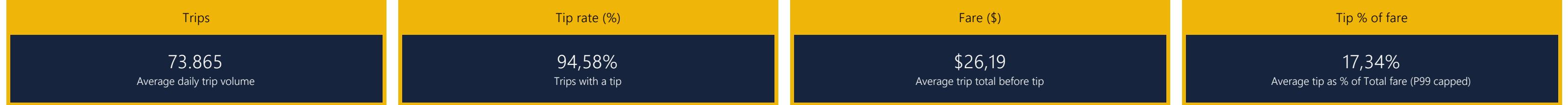


NYC Yellow Taxi Tips Analysis

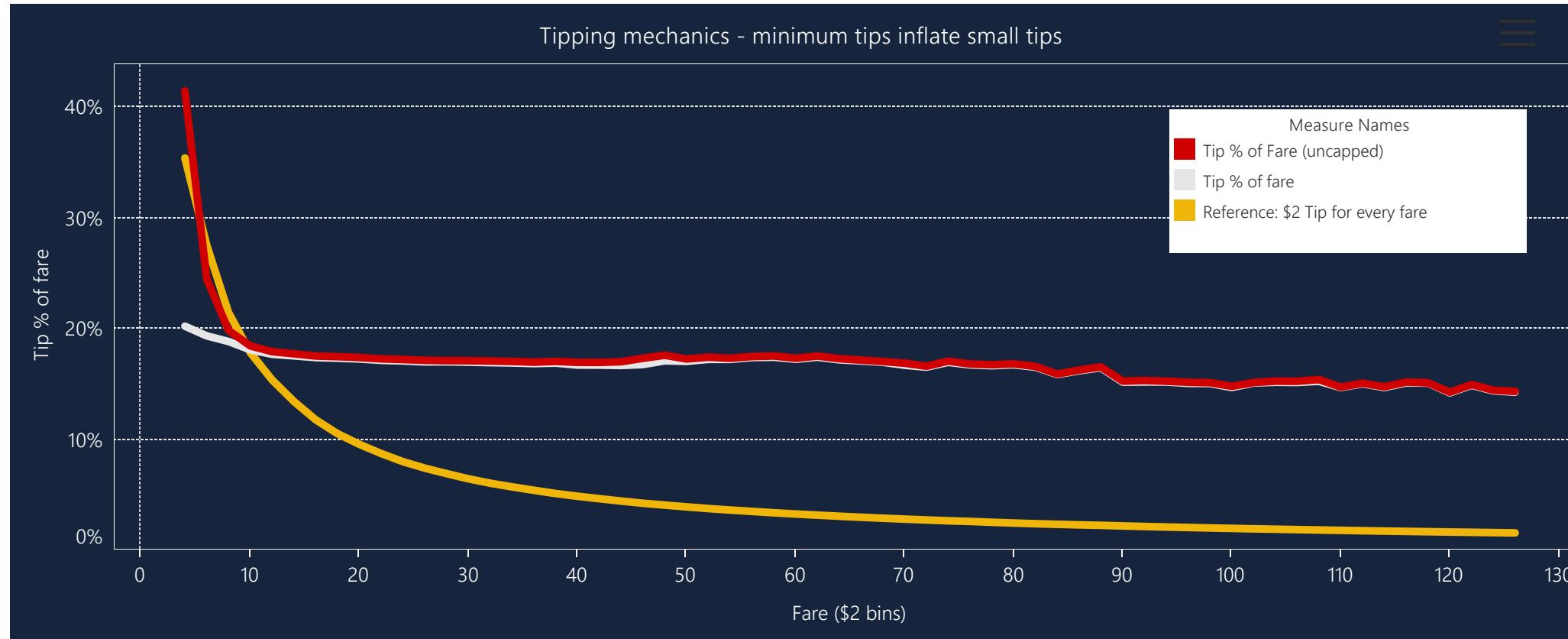
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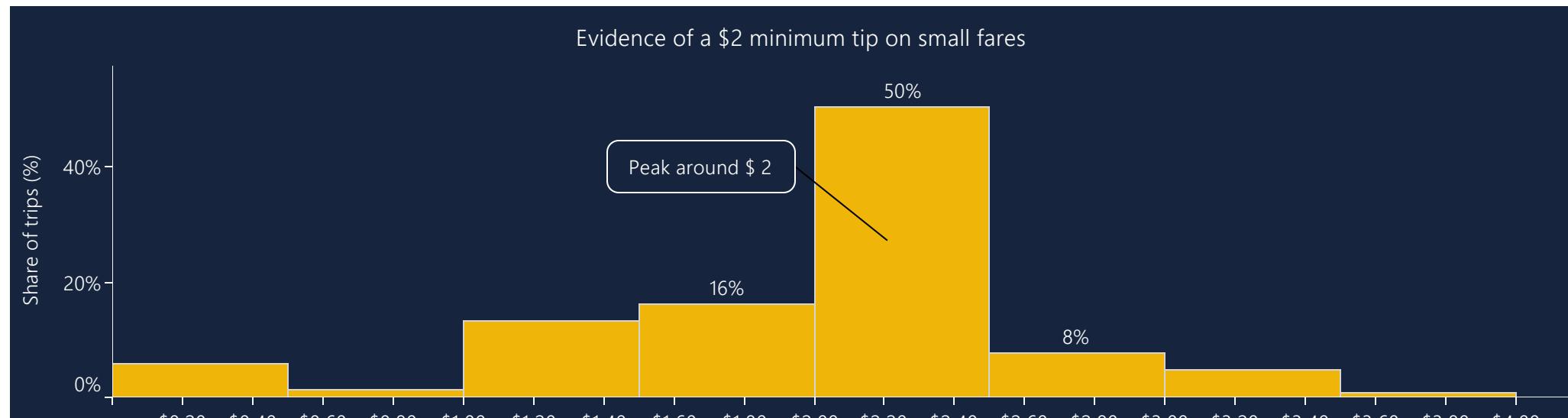
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— Tipping Mechanics

Hypothesis H0: Fare amount dominates tip-rate (%)



- Minimum trips per bin = 1000 trips
- small fares (up to ~\$12): minimum tips (~\$2) are added
- when fare rises people follow preset percentages (15-20 %)
- Tip % of fare depends on fare size
- **Implication:** hypothesis tests control for fare

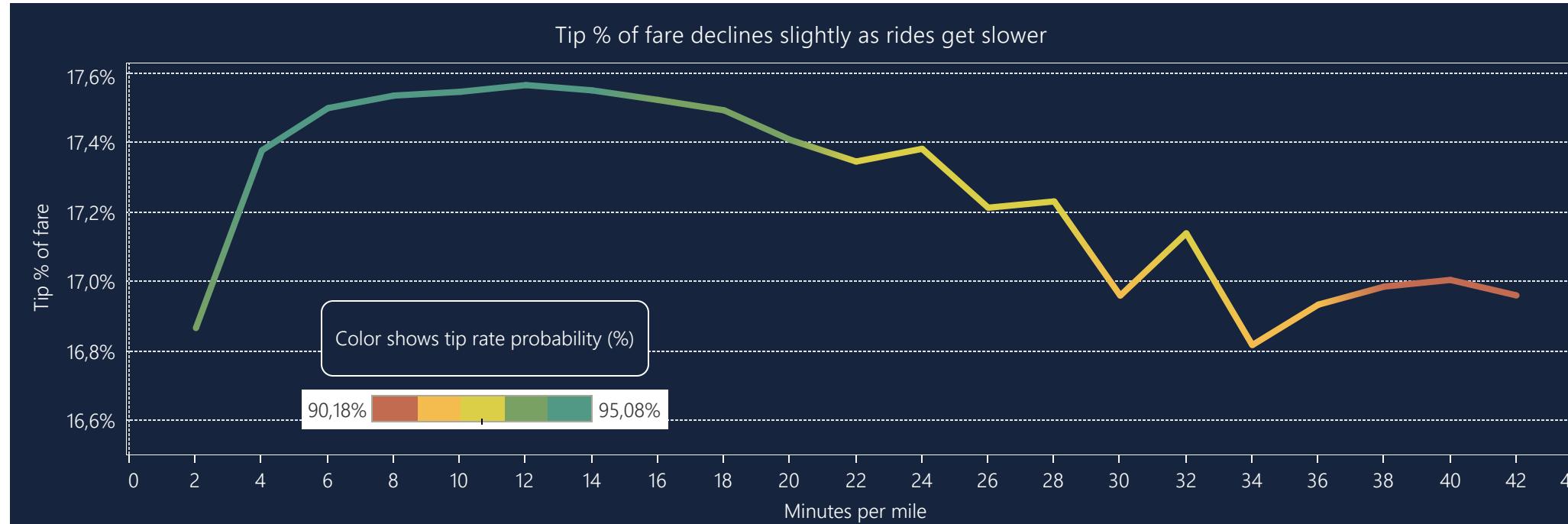


- **Focus range:** Fare \$1 - \$12 (min. 1.000 trips/bin)
 - **Observed:** tips peak around \$2
 - **Result:** \$2 minimum tip inflates tip % on small fares
 - **Evidence:** \$2 minimum tip inflates tip % on small fares
- Trip size is the #1 confounder—small trips show step-like tipping behavior, so we control for trip size in all hypothesis tests.

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— H2 Stress / Friction: More stressful rides reduce tipping

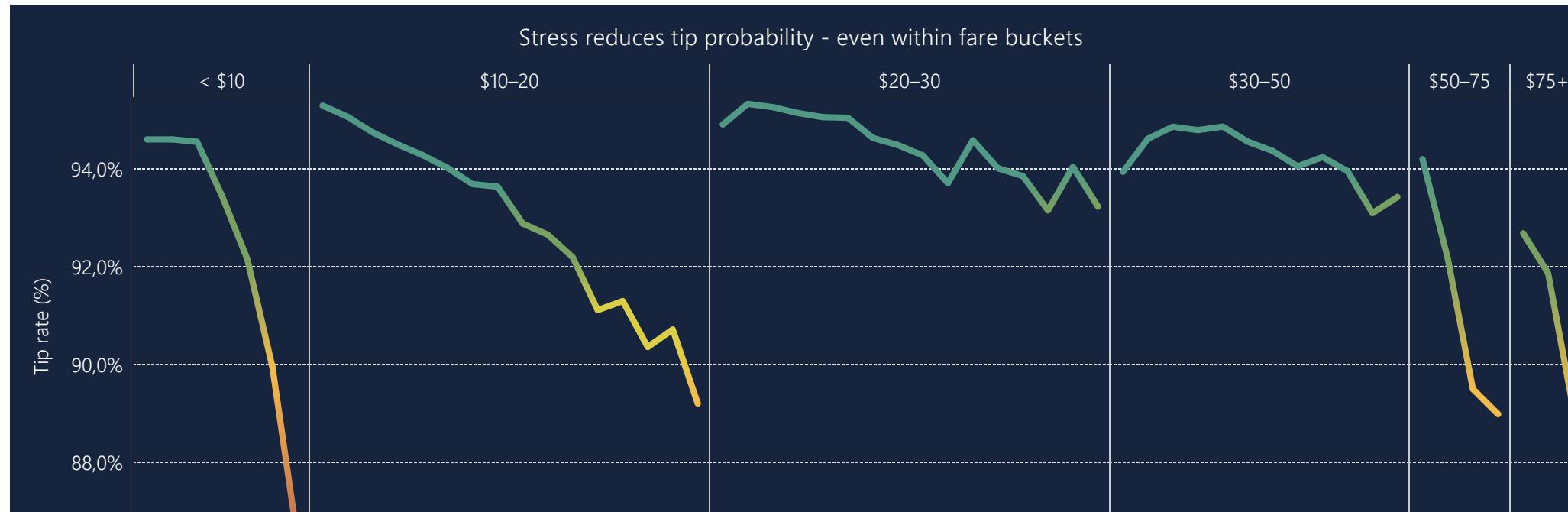
| Stress proxy: minutes per mile (duration ÷ distance) | controlling for fare bins



- ▶ Stress proxy: minutes per mile (slower = more friction)
- ▶ Tip % of fare declines as trips get slower (-0.5 to -0.7 pp-)
- ▶ Color gradient indicates greater influence on prob. of tipping

Stop-and-go traffic mainly reduces whether people tip, not the tip % when they do

Is Tipped?
0 to 1

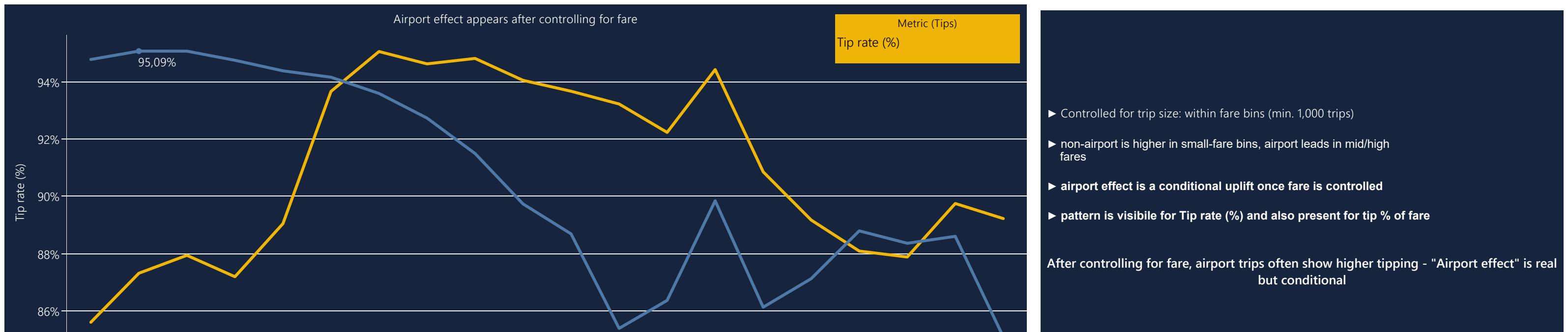
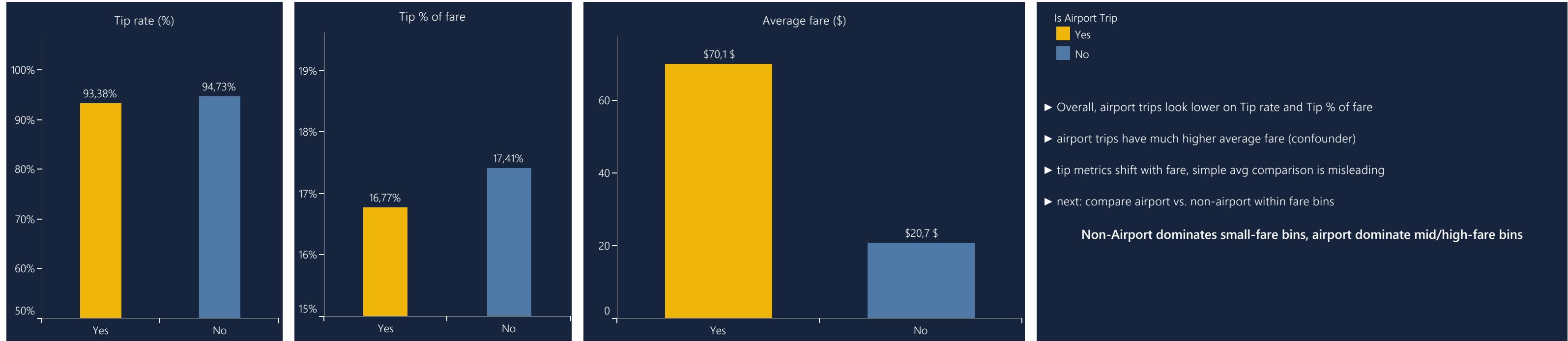


- ▶ Controlled for trip size: shown within fare buckets
- ▶ Minimum sample: ≥ 1,000 trips per bin
- ▶ Declining tipping probability in every fare bucket
- ▶ higher share of zero-tip trips. Among tipped trips, tip % is slightly higher

The effect size is modest in percentage points, but it's directionally consistent and persists within fare buckets. Traffic friction reliably reduces the prob. of tipping

NYC Yellow Taxi Tips Analysis

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— H4 BID exposure & tipping: threshold effect

| Business improvement district (BID) exposure = dropoff zone overlap (%) | control for fare buckets | outcome: tip rate (%) / Tip % of fare

